

TEMPLATE

Agency: U.S. Environmental Protection Agency

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Ongoing support to Ukraine:

Outstanding asks from Ukraine to your agency:

Agency capabilities for assessing and valuing ecosystem services and environmental degradation:

1. Environmental economists with high-level expertise in valuing losses of ecosystem services and other environmental degradation. This expertise has been used in a variety of settings:
 - a. Valuing damages from oil spills (both fresh and ocean waters)
 - b. Forest fires
 - c. Chemical spills
 - d. Industry releases of air pollution
 - e. Discharges of environmental contaminants into water.
 - f. Losses from destruction of wetlands and other ecosystem resources
2. Ecologists, environmental engineers, and other environmental scientists that can identify causes of environmental degradation, map, the loss of environmental and ecosystem services to beneficiaries and work with economists (cited in 1 above) to value these damages.
3. EPA has expertise (both in environmental economics and the environmental sciences) on the design and implementation of the United Nations Framework for natural capital accounts. The U.N. framework — the System of Environmental-Economic Accounting—Ecosystem Accounting (SEEA EA) — was adopted by the UN Statistical Commission and marks a major step forward that goes beyond the commonly used statistic of gross domestic product (GDP) that has dominated economic reporting since the end of World War II. This measure would ensure that natural capital—forests, wetlands, and other ecosystems—are recognized in economic reporting. EPA scientists also contributed to the development of this U.N. framework and other natural capital accounting frameworks. Such frameworks would provide the basis for inventorying and valuing changes in ecosystem services with a globally recognized approach.

4. Experts across disciplines on the use of satellite and other remote sensing data that can provide key quantitative metrics for changes in environmental quality. Such data could drive valuation

Available/Applicable Datasets:

1. EPA has integrated assessment models that allow us to map environmental damages from natural and human-induced disasters, (e.g., forest fires) related to both air and water pollution.
2. Fate and transport models and other environmental engineering models that can map degradation of ecosystem and environmental services spatially and ultimately to beneficiaries.
3. Valuation models that allow monetization of ecosystem services (those ideally, these models would need to use Ukraine specific data.)